



# Joslin Garden **PRESERVATION PLAN REPORT**

## **Joslin Garden**

2431 West Lake Road  
Raleigh NC 27609

*For:*

## **The City of Oaks Foundation**

PO Box 18928  
Raleigh, NC. 27619

*And*

## **City of Raleigh Department of Parks and Recreation**

222 West Hargett Street, Suite 608  
Raleigh NC 27601

*Prepared By:*

## **The Site Group**

1111 Oberlin Road  
Raleigh NC 27605

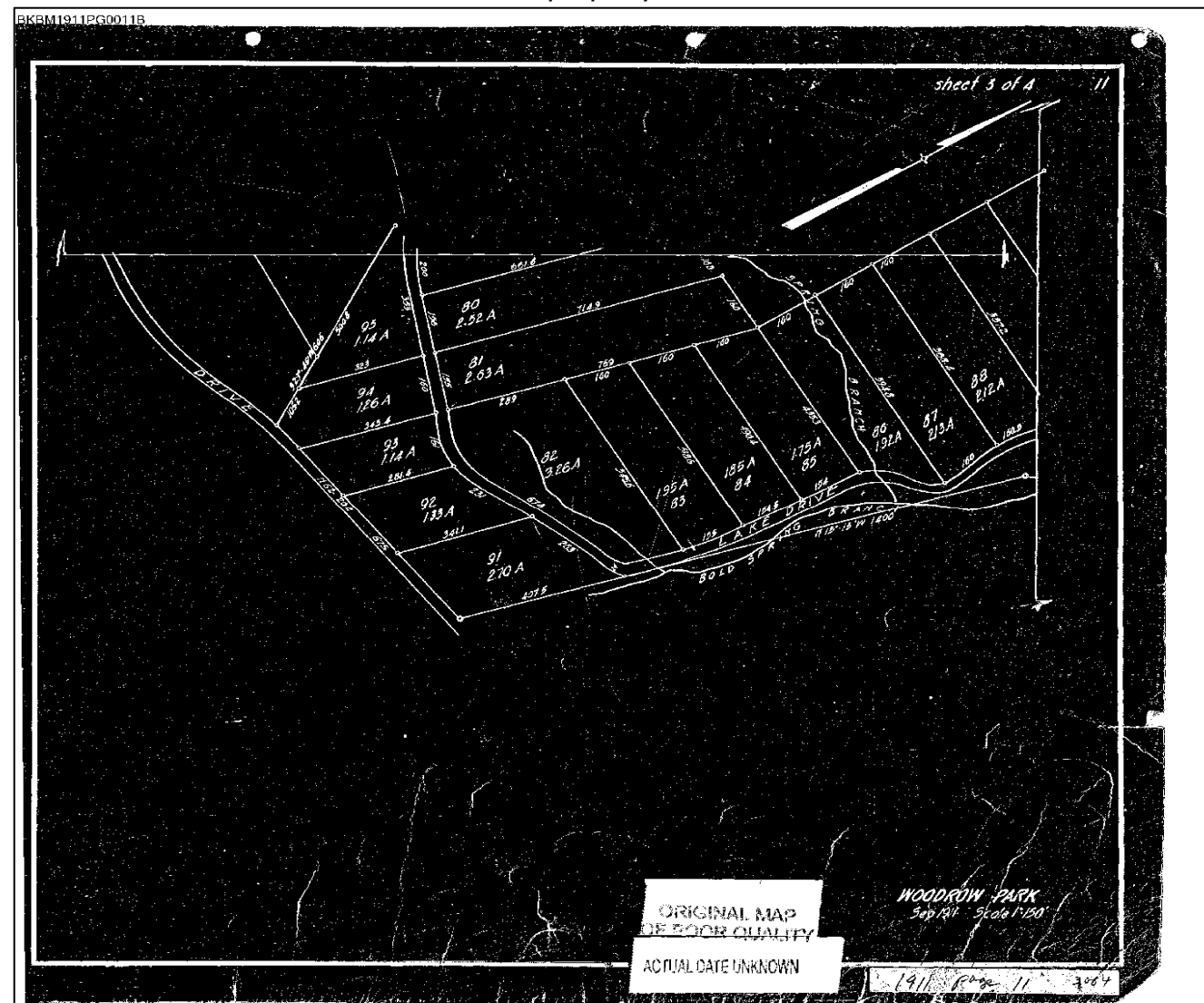
DRAFT

**October 1, 2012**



## Background

In the early 1900s, the land that is now part of Joslin Garden was part of a farm owned by J. Bryan Grimes, former N.C. Secretary of State. The farm's terraces remain visible in the arboretum area of the garden. The land was nicknamed "Arrowhead Farm" because of the number of arrowheads unearthed on the property.



*Page 3 of 4 of the recorded subdivision*

Joslin Garden Draft Preservation Plan  
10/12/2012

Subdivided in 1911, Grimes farm became known as the Woodrow Park Subdivision<sup>1</sup>. Lots 86, 87 and a portion of lot 88 would ultimately become the Joslin Garden property.

The first known deed of what would later become Joslin Garden was the sale, in 1935, of lots 86 and 87 from Carrie Laughinghouse to F.B. and Pauline Hamrick<sup>2</sup>. The Hamrick's sold the property to Mrs. Claudia Jones Hurt in 1937.<sup>3</sup> She owned the property until selling the 3.5-acre site to the Joslins in 1950<sup>4</sup>.

In 1968, the Joslin's purchased a 0.6-acre portion of lot 88 from their neighbor, the Kimry's<sup>5</sup>. This parcel includes the areas of the Arboretum and the Jeu de Paume. In 1996, the Joslin's purchased a quarter acre parcel that would become the "Lily Walk"<sup>6</sup>. This was a lot recombination among the adjoining neighbors. In 2005, they made their final purchase when they converted an existing shared driveway easement into a parcel purchase.<sup>7</sup>

## About the Joslins

**William Joslin** was born in 1920 in Raleigh's Cameron Park neighborhood. He attended Wiley Elementary School and Broughton High School. While at the University of North Carolina at Chapel Hill, Mr. Joslin benefited from the mentoring of then University President Frank Porter Graham, a leader known for progressive ideas on education and civil rights.

During World War II, William Joslin served in the U.S. Navy in the Pacific theater.

After WW II, William Joslin met Mary Coker while he was a student at Columbia University in New York City and she was a student at Vassar College in Poughkeepsie NY. They married in 1946.

After graduating in 1947 from Columbia Law School, Mr. Joslin served as a clerk to U.S. Supreme Court Justice Hugo Black, another progressive thinker who became another role model. In 1948, the Joslins moved back to Raleigh, where he started his law practice.

On February 21, 1950, they bought a 3.5±-acre tract of forested land from Mrs. Claudia Jones Hurt, in what was then the northern outskirts of Raleigh. Turning this property into a richly varied garden of rare and native plants and trees, flowers and vegetables became the Joslins passion for the next six decades as they raised their six children.





# Joslin Garden Preservation Plan

## Existing Conditions

While maintaining an active law practice, Mr. Joslin also devoted himself to the causes that he loved: fair elections, progressive politics, education, and preservation of natural areas.

Mr. Joslin was a key figure in North Carolina's environmental movement. He was also active in Democratic Party circles, serving as chair of the state board of elections under Governor Terry Sanford and chair of the Wake County Democratic Party

Mr. Joslin was a lifelong member of Christ Episcopal Church in downtown Raleigh, and served in many different capacities. In 2007, he received the Christ Church Cross in recognition for outstanding service to the church.

**Mary Coker Joslin** was born in 1921 in Hartsville SC and grew up on the campus of Coker College. Mary's father, David Coker, was an agricultural reformer; her uncle, William Chambers Coker, was a botany professor at the University of North Carolina at Chapel Hill, and co-founder of Coker College in Hartsville South Carolina. Their inspiration led Mrs. Joslin to major in botany at Vassar College.

In her 50s, with the youngest child starting school, Mrs. Joslin earned her PhD in French and then taught French at Ravenscroft and St. Augustine's College.

Mrs. Joslin has authored several books, including *The Brown House* and *William Chambers Coker, Passionate Biologist*.

Mrs. Joslin shared her husband's zest for politics and was a founding member of the Wake County Democratic Women.

The Joslins led the restoration of the Coker Arboretum at University of North Carolina at Chapel Hill and they were key members in preserving the Margaret Reid Wildflower Garden. They rallied their neighbors and purchased the three parcels that were under development pressures along West Lake Drive and White Oak Drive. The parcels, now known as Charlotte H. Green Park, were then donated to the City of Raleigh in 1986.<sup>8</sup>

The couple was recognized in the 2011 Class of Inductees into the Raleigh Hall of Fame. This honor, bestowed by the City of Raleigh, was in recognition for their "pioneering conservationism, key leadership roles in the establishment of local land conservancies, and as the stewards of a verdant woodland garden and botanical refuge which, through their gift

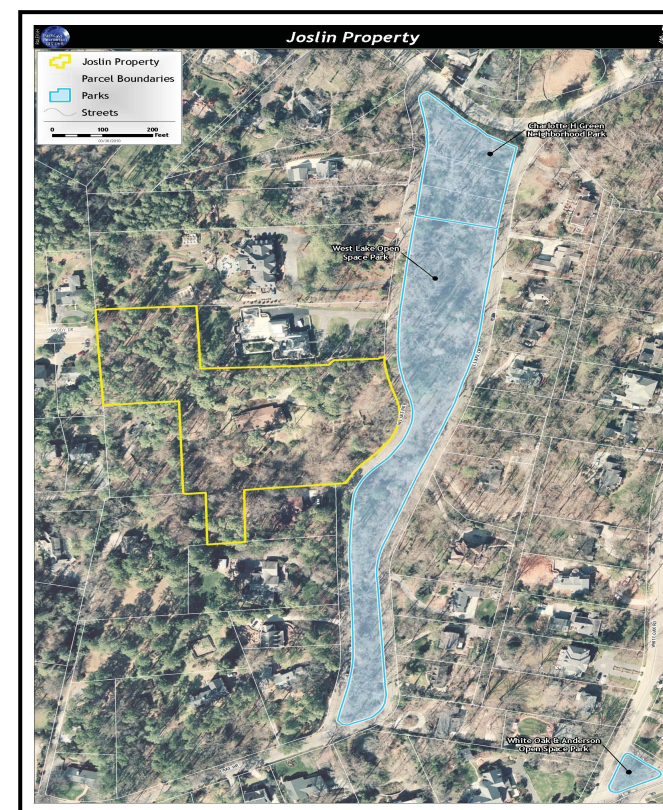
to the City, would become a jewel the crown of Raleigh's park system."<sup>9</sup>

Mrs. Joslin currently lives in the house and will continue to occupy and maintain the house under a life estate agreement with the City of Oaks Foundation.

### The Joslin Garden Neighborhood

When William and Mary Joslin purchased the property in 1950, it was on the northern outskirts of Raleigh. Today, the 4.2-acre property is considered prime "Inside the Beltline" real estate. The winding streets and rolling topography of the neighborhood belies the fact

that the property is only 3 miles north of downtown Raleigh. This same neighborhood charm also masks the fact the property is only a mile south of the North Hills development and a mile north of the Five Points neighborhood. Only a few blocks to the west is Glenwood Avenue, providing convenient access to downtown and other parts of the city. Its proximity to I-440 makes the property convenient to other parts of the region.



### Demographic Overview

In May 2012, the City of Raleigh Parks and Recreation Department prepared a Demographic Analysis for a 1.5-mile radius around Joslin Garden. They chose this radius to avoid collecting demographics from Raleigh's Downtown Core Area.

Within the study area:

- 88.9% of the population is Caucasian (57.5% citywide average)





# Joslin Garden Preservation Plan

## Existing Conditions

- 60.6% of the homes are owner occupied
- The average family income is \$170,584 with a median income of \$76,739 (\$51,696 citywide median)
- 62.5% of the residents have a bachelor degree and higher (46.2% citywide avg.)

### Participation in City of Raleigh Parks and Recreation Programming

In May 2012, the City of Raleigh Parks and Recreation Department prepared a brief report that outlined participation in City of Raleigh parks and recreation activities.

The report, which spanned the 2011 calendar year, indicated that within the 1.5-mile radius of Joslin Garden, 7.2% of the entire population and 949 households (11.8% of total households) participated in parks and recreation programs.

The most participation occurred at the Laurel Hills and Jaycee Community Centers which offer the two of the most popular activities which are youth basketball and summer camps.

### Other Public Gardens in the Triangle Region

There are approximately 17 gardens of varying size and scope within the Triangle Region. Ten are within 8 miles of Joslin Garden.

- The JC Raulston Arboretum has a close and personal connection to Joslin Garden. JC Raulston Arboretum, primarily a working research and teaching garden, is approximately 10-acres in size and is a part of North Carolina State University. Mr. and Mrs. Joslin were friends with JC Raulston and shared their common passions for plants and the outdoors. Several plants located within Joslin Garden are gifts from JC Raulston.
- Within 4 miles of Joslin Garden are the more formal and period appropriate gardens, including the Raleigh Rose Garden, the Joel Lane Museum House Garden, Haywood Hall Historic House and Gardens and the Ellen Mordecai Garden.
- The Margaret Reid Wildflower Garden is a private garden and one of the closest to Joslin Garden. The Wildflower Garden is 1.5 -acres and focuses on native plants. The Joslin's were instrumental in its preservation.

- The De Hart Botanical Garden in Louisburg NC is about 25 miles north. This garden was recently donated to Louisburg College. The donor, Allen de Hart, has spent more than 50-years caring for the garden, which is covered in native plants.

- Coker Arboretum is about 25 miles east on the campus of the University of North Carolina at Chapel Hill. In 1903, Dr. William Chambers Coker, Mrs. Joslin's uncle, started the arboretum. William and Mary Joslin were the leaders of the restoration of Coker Arboretum.

- The Sarah P. Duke Gardens is a private garden open to the public. Located on the Duke University campus, this garden was started in the early 1930's. At 55 acres, Duke Gardens is one of the largest in the Triangle.

### Parks, Greenways and Bike Routes

East of Joslin Garden is West Lake Park. This north-south linear park is 3.56-acres, approximately 1330 feet long and ranges in width from 50' to 150'. A stream runs through the center of the park. There are no structures and the environment is natural woodland.

Charlotte H. Green Park abuts West Lake Park to the north. The Joslins led a group of neighbors and purchased the three wooded parcels. Once purchased, the group donated the land to the city for preservation as a park, thus preventing the land from residential development. The deed identifies the participating neighbors as well as the restrictions preserving the property as a park.<sup>10</sup>

North of Joslin Garden is a 15'-wide undeveloped greenway easement that is part of a single-family lot at 3100 White Oak Road. This and an adjoining undeveloped easement connect White Oak Drive to the Crabtree Creek Greenway. There is an existing greenway connection on Rothgeb Drive.

Joslin Garden is in near proximity to a few established bike routes. Route #9 is the closest, running along White Oak Drive. Just south of White Oak Drive, Route #9 intersects with Route #10 at Barton and Harvey Streets. After passing the vicinity of Joslin Gardens, Route #9 intersects with Crabtree Tributary Greenway, to the north. The route continues north intersecting with Route #12 before it terminates at Cedar Hills Park.

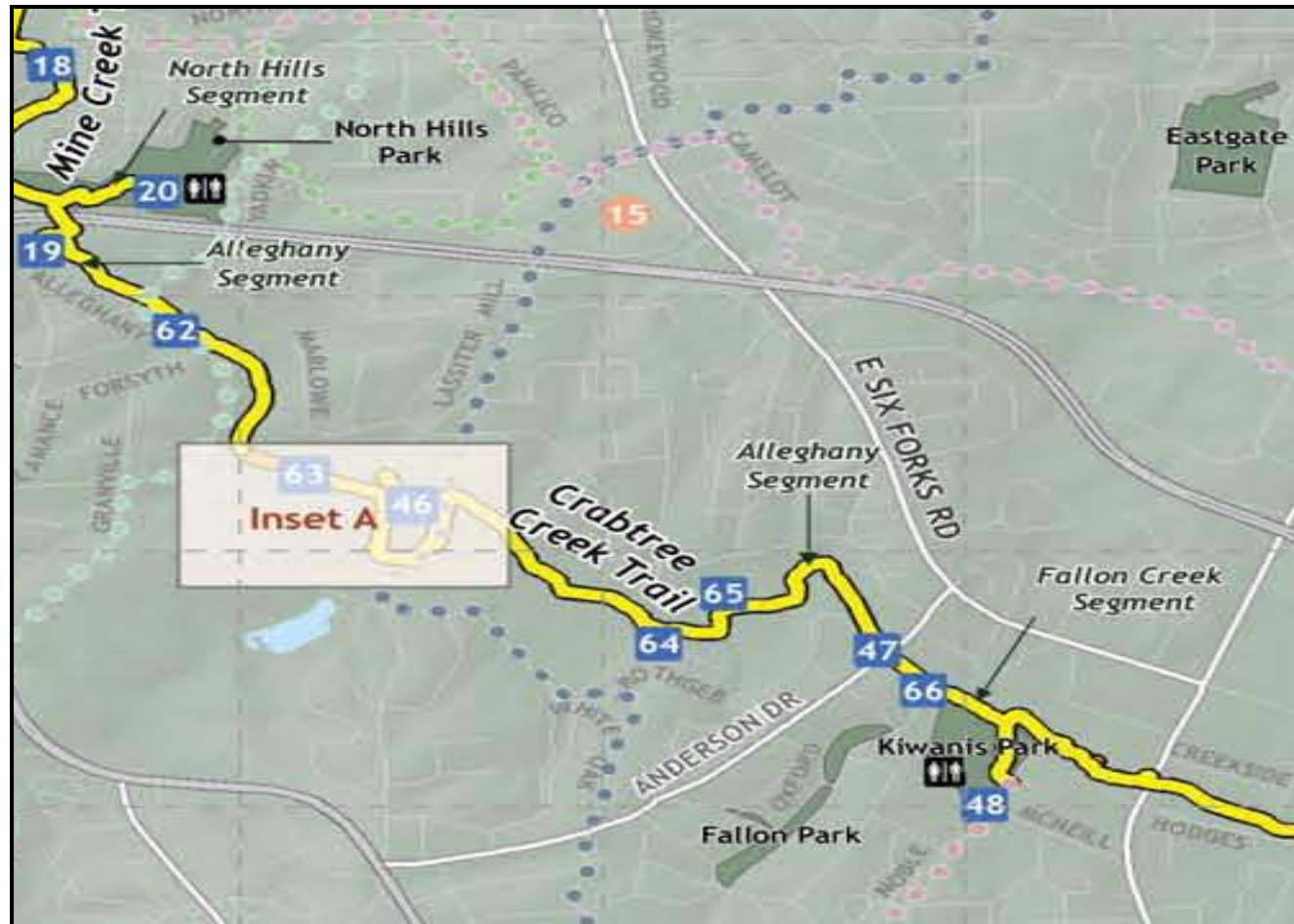
The greenway system physically connects Joslin Garden to Kiwanis Park and North Hills Park.



# Joslin Garden Preservation Plan

## Existing Conditions

Kiwanis Park connects via the Crabtree Tributary Trail and North Hills Park via the North Hills Trail.



Joslin Garden is in close proximity to Drewry Hills Parks 1 and 2, Kiwanis Park and Fallon Park. Kiwanis Park is the most developed of the three having a neighborhood center, various outdoor fields, a picnic shelter and a playground.

### Shopping, Dining and Social Opportunities

A mile north of Joslin Garden is the area known as North Hills. This mixed-use development includes residential, grocery, dining, retail shopping, a movie theater, hotel summer concerts

and many more amenities.

About a mile south of Joslin Garden is the area known as Five Points. This area contains a pharmacy, bank, churches, dining, coffee shops and other services that support daily living and social interaction.

Also within a mile, Joslin Garden is the Carolina Country Club. The Club provides access to golf, tennis and a pool for its members and their guests. It has been at its current location for more than 100-years.

### Site Conservation, Ownership and Management

Always stewards of their property, the Joslins wanted the Garden to remain a unique landscape in perpetuity. In 1997, the Joslins granted a remainder interest in the property to the Board of Trustees of the Endowment Fund of North Carolina State University (Endowment Fund)<sup>11</sup>, and transferred the Conservation Easement to the Triangle Land Conservancy (TLC). The Joslins intended the Conservation Easement to:

"...continue the conservation values of the property and be preserved and maintained by permitting only those land uses...that do not significantly impair or interfere with them,... those land uses relating to maintenance and propagation of native plants, shrubs, and trees; and the introduction, testing, development, and propagation of new plants, shrubs and trees,..."

The Joslins further intended for the Conservation Easement to:

"...assure that the property will be retained forever in its present condition as a garden of native and cultivated trees, shrubs and plants... a garden for testing new and improved species and cultivars and to prevent any use of the property that will impair or interfere with the conservation values of the property."

The Joslins, as owners of the property, wanted:

"To convey... the primary duty and right to preserve and protect the conservation values of the property in perpetuity."



# Joslin Garden Preservation Plan

## Existing Conditions

In 1999, the Joslins conveyed a remainder interest by deed to the Endowment Fund.<sup>12</sup>

In 2006, the Joslins conveyed to the Endowment Fund a remainder interest in the 0.03-acre parcel of property that had not been conveyed by deed in 1997.<sup>13</sup>

By the latter 2000s, the Joslins began considering a philosophical change in the intended use of their property, wanting to provide for broader public use and access versus their original intent of focusing on academic research, teaching and outreach.

In 2010, after reaching a consensus between themselves and the Endowment Fund, The Joslins collaborated with the City of Raleigh in the formation of a not-for-profit tax-exempt entity, The City of Oaks Foundation. The new foundation would receive the remainder interest in the property from the Endowment Fund. The Conservation Easement would stay with the Triangle Land Conservancy.

December of 2010, the Joslins and the City of Raleigh marked the founding of the City of Oaks Foundation as the not-for-profit tax-exempt entity that would receive the remainder interest in the property.

The Endowment Fund transferred the remainder interest in the property to the City of Oaks Foundation in March of 2012. Mrs. Joslin will continue occupancy and maintenance of the house under a life estate agreement with the City of Oaks Foundation.

Currently the Foundation and the City of Raleigh Parks and Recreation Department are developing a long-term agreement for the management and stewardship of the Garden.

### ***Property Overview***

Joslin Garden contains the Joslin residence, a 1950's ranch-style home with multiple additions that accommodated a growing family. Taking advantage of the rolling topography, the house includes a walkout basement with a small efficiency apartment and separate service area.

The wooded property has an open, semi-sunny central yard and the house opens onto this space. The grounds are best described in "Brief Guide to the Joslin Garden for Open Garden Day, April 3, 2004",<sup>14</sup> as a series of garden sections.

Each garden section was further described for the distinct plant collections that are within the borders of a particular section. The **Flora** section provides additional details.



### ***Steps to the Formal Garden***

Many garden structures enhance the Garden. These include fences, steps, bridges, handrails, pergola, trellises and gazebos. These structures are generally in good condition and are still serviceable as garden accoutrements.

Multiple improvements are recommended later in the report to make the site accessible to the

public.

The stream that courses through the gardens is designated a perennial stream and contains an associated 100' Neuse Riparian Buffer. This buffer extends 50' on either side of the top of bank of the stream. Permits will be required from NCDENR prior to upgrading of existing facilities, other improvements and redevelopment and within the buffer.

The stream includes jurisdictional wetlands. Permits will be required from the U.S. Army Corps of Engineers (USCOE) for redevelopment and upgrading of facilities within the jurisdictional wetland.

The general condition of the existing landscape and hardscape infrastructure elements that make Joslin Garden unique within a suburban environment will be discussed later in this document.

### ***Hydrology***

The property is within the Crabtree Creek watershed and is on moderately sloping hillsides that drain to an unnamed Tributary along the southern portion of the property. The





# Joslin Garden Preservation Plan

## Existing Conditions

unnamed Tributary flows west to east across the property, from the Woodrow Drive right-of-way to West Lake Drive. At West Lake Drive, it enters a 36" storm pipe and crosses under the road. Once across, it discharges into West Lake Park. From there it flows north, eventually entering Crabtree Creek.

Several environmental factors affect the stream including an existing Neuse Riparian Buffer and jurisdictional wetlands.

Ecotek, the project's wetland specialist, delineated the Neuse Riparian Buffer and federal jurisdictional wetlands. The Existing Conditions Map, SK-1 shows the limits of the delineations. The Garden contains 0.90-acres of Neuse Riparian Buffer and 0.09-acres of federal jurisdictional wetland.

Ecotek prepared and submitted a Wetland and Stream Buffer Report<sup>15</sup> to both the NC Division of Water Quality (NCDWQ) and the US Army Corps of Engineers (USCOE). Both agencies concurred and accepted the respective delineations.

The property is not within a 100-year floodplain per FEMA Flood Map #3720 Panel #1705, dated 5/2/2006.

Wake County Soil Mapping indicates that no alluvial soils are present on the property.<sup>16</sup> The soils along the lower portions of the unnamed tributary are White Store Sandy Loam (WmE). The remaining soils are generally Cecil Sandy Loam soils (CeD, CeC2) and occupy the 6-15% slopes.

Three natural springs feed the unnamed tributary. Their locations are shown on the Existing Conditions Plan, SK-1.

There is a partial section of a curb and gutter system at the end of Gaddy Drive. From the yard inlet, the storm water is conveyed through an underground pipe to the unnamed tributary. The remaining storm runoff from Gaddy Road bypasses the curb and gutter section and sheet flows into the Arboretum area. A remnant of an agricultural ditch installed to intercept the runoff is still visible in the Arboretum, attesting to the fact that this has been an ongoing situation for quite some time.

Before the Joslins purchased the property, the land had included a small farm. In the span of years since the agricultural use had stopped the site became populated with a wide variety of native trees, shrubs and plants.

Mr. Joslin introduced additional Piedmont woodland species that were common to the climax forests of the Piedmont area. He also introduced a number of non-native plantings. The overall garden integrates into the natural woodland landscape creating a unique environment and experience for visitors.

The plantings have multiple origins. Many of the plantings were gifts from Mrs. Joslin's mother, Kay Coker and J.C. Ralston, a close family friend. Institutional gifts were made by JC Ralston Arboretum in Raleigh, Kalmia Gardens at Coker College in Hartsville South Carolina and the NC Botanical Garden in Chapel Hill. The topiary at the center of the formal garden was a gift of the artist, Pearle Fryer.

During the winter months, Mr. Joslin spent time researching his next interest and proposed plantings. Favorite sources for his plants included Woodlanders, Inc., in Aiken SC, Niche Gardens in Chapel Hill NC and Plant Delights Nursery in Raleigh NC, just to name a few.

The Garden evolves as the plantings mature, changing the face of the landscape and creating concerns for plant stresses. Most upper story tree plantings have matured, resulting in the increase of a leafy tree canopy. This adversely affects many of the understory species that require ample sunlight. The increase in shade and decrease in sunlight penetration through the tree canopy is causing many understory species to perform poorly and in some instances disappear altogether.

Judy Morgan-Davis, of the JC Raulston Arboretum and Grayson Maughan, Gretchen Sandaris and Jeff Dawson of the City of Raleigh Parks and Recreation Department recently completed an inventory of many of the species in the Garden. The inventory includes a GPS mapping of plants location.

The Garden can best be described as thirteen sections. Each section contains various plant collections of similar genus and species. Generally, the various plant collections do not have defined edges, but blend into the wooded environment.

### **Flora**



# Joslin Garden Preservation Plan

## Existing Conditions

### The thirteen garden sections are:

- **Beech Copse** – this area is at the extreme northeast of the garden and is developing a collection of ephemeral wildflowers and a number of young beeches. The setting of mixed variety of trees is as would be found in undisturbed native Piedmont woodlands.

- **Wildflower Circle** – the area enclosed by the driveway includes ephemerals and a variety of ferns.

- **Camellia Collection** – The collection of Camellias adjacent to the driveway is especially important to Mrs. Joslin. Many of the plantings were gifts from Kalmia Gardens in Hartsville South Carolina. Mrs. Joslin's mother developed Kalmia Gardens as a part of Coker College also in Hartsville. The Lois B. Coker and Florence Coker Camellias are both gifts from Kalmia Gardens and located here. These two varieties were named for members of Mrs. Joslin's family. This is also Mrs. Joslin's favorite garden section.

- **Rose Garden** – The rose garden lies just beyond the shadow line of the front of the house. The Rose Garden

**Pine Woodland** – this area is to the right of the Rose Garden. The Pine Woodland contains collections of kalmia, azaleas and hawthorns. The hawthorns are planted along the trail that parallels the north property line. Hawthorns are not common to this part of the Piedmont.

- **The Arboretum** – There are several varieties of tree and shrub plantings, including an offspring of the Davy Poplar on the campus of the University of North Carolina at Chapel Hill. The Arboretum includes several Japanese Parasol trees and three Joslin Oaks, planted as a memorial to Mr. Joslin

- **Jeu de Paume** – This area was formerly a clay surfaced tennis court installed around 1960. This area was wooded prior to development the Jeu de Paume. Today it is a lawn panel bordered by flowering trees and shrubs. A gazebo at the west end invites you to stop and enjoy a sunnier portion of the Garden. A trail leads from this area through the woods where there are bulbs and wildflowers that bloom in March and April.

- **Formal Garden and Lawn** – This area includes the outdoor living areas, a pergola built as a replica of Mrs. Joslin's uncle at Coker Arboretum, an arbor and a formal garden with a

brick walkway. The formal garden features Pearl Fryer topiary at the focal point.



- **Buckeye Trail** – The trail leads south of the Jeu de Paume to the Buckeye collection. Mr. Joslin chose an interesting variety of Buckeye plantings for placement along the

A bridge separates the Buckeye Trail from Laurel Hill. From the bridge, you can see remnants of the concrete dam that once formed a farm pond.

*View into the Formal Garden through the arbor*

- **Laurel Hill** – There is a spring emerging from the base of a huge tree just south of the path. As the path ascends the north-facing slope, there are the mountain azaleas. Sit on the bench at the top of the hill and view the two Franklinia trees. Many of the plantings in this area do well in the mountains. There is one especially old mountain laurel, a plant that the Joslins claim was already old in 1950 when the property was purchased. A Japanese Styx is planted near the Tributary.

- **Lily Walk** – This is the most recent land purchase where there has been an effort to establish a group of lilies and zephranathes. There is also a very large burning bush.

- **Creekside Meadow** – This area is adjacent to the north side of the unnamed tributary and south of the Formal Garden. It supports a variety of distinctive plant materials including a large established grouping of ferns, several distinct varieties of deciduous magnolias and an "ancient" tulip poplar. There is a small grove of cypress knees in a low, wet area adjacent to the Well Pump House. Cypress Knees are extremely rare to this area of the Piedmont.





# Joslin Garden Preservation Plan

## Existing Conditions

- **Scillia Hill** – This is a shady area south of the unnamed tributary. There are Scillia planted which appear in early spring. Myrtle (Vinca minor) covers the hillside the rest of the year and offers a blue cast to the ground during peak flowering time. There are several native rhododendrons planted are along the streambed and a naturalized Japanese Parasol tree growing along the hillside.

### *Deciduous Magnolias*



### **Fauna**

The Garden has a typical cross section of suburban wildlife. Rabbits, moles, voles, squirrels, raccoons and deer populate the Garden and adjacent natural woodland landscapes. Like most gardens, rabbits and deer have affected many of the successful plant species.

The Garden is also a significant bird habitat. Mr. Joslin was an avid birder and the broad spectrum of plantings contributes to the diverse habitats for many of the bird species. Joslin Garden and West Lake/Charlotte H. Green Parks form a significant habitat for birding.





# Joslin Garden Preservation Plan

## Existing Conditions

### **Structures**

The Garden includes two types of structure: the residence, which is by far the largest and most important structure within the Garden and the garden structures themselves.

#### **The Residence**

The Joslin residence is the major structure on the property. Mr. Joslin's architect brother, J. Deveroux (Dev) Joslin, designed the original home exterior and floor plan. Built in 1951, the house took advantage of the topography and was sited with a basement that includes a small efficiency apartment and a separate service room. A large deck spans much of the rear of the house and overlooks the Garden.

There were multiple additions to the original floor plan reflecting a growing Joslin family. The current footprint of the house is approximately 3500 square feet, including the deck and patio areas. The heated interior square footage is 4,160 square feet.

The original design of the home was a one-story ranch with natural wood siding and masonry walls exposing the basement. One of the several additions added a second floor to the western portion of the house.

Integrated Design, the architectural consultant for the Preservation Plan, prepared a scaled floor plan and assessed necessary improvements to make the existing floor plan handicap accessible.<sup>17</sup>

The floor plan indicates a large combination living/dining area that leads directly onto the deck. A large expanse of glass along the deck wall floods the space with natural light. A large kitchen and food prep area and smaller rooms are aligned along a central hallway.

The house is served by electric, public water, sewer, and natural gas but does not have an indoor sprinkler system.

As shown on SK-1, the southwest portion of the residence is within Zone 2 of the Neuse Riparian Buffer. Because of the southwest portion of the house is located in Zone 2 of the Buffer, permitting will be required from NC Department of Environment and Natural Resources prior to making modifications to the structure or any of the hardscape items within the Zone 2. New structures or other new hardscape items will also require permitting

if within Zone 2 of the buffer.

#### **The Garden Structures**

The garden structures are amenities and accoutrements to the Garden. They include a pergola, gazebos, a variety of wooden arbors, a well house, brick walkways, several sets of stone and crosstie steps and ramps, several wooden footbridges, a variety of fencing and fence types and numerous garden benches.

In 2011, the City of Raleigh Parks and Recreation Department prepared a report that evaluated each structure based on the respective use in the Garden. The City parks and Recreation Department Structures Report<sup>18</sup> includes photographs of each structure. The report concluded that a majority of the Garden structures are in good condition relative to non-public garden uses. The wooden arbors are the only category that ranked in poor or fair condition.

#### **Site Infrastructure**

The Garden reflects the urban environment in the number of public utilities/easements and private utilities available to the property.

#### **Well House, Well, Backflow Preventer and Irrigation**

According to the City Parks and Recreation Department Structures Report, the well house appears to be in good condition. It contains the well pump and irrigation backflow preventer (BFP). The well house is just south of the eastern vegetable garden and within Zone 2 of the Neuse Riparian Buffer.

The well provides water for the irrigation system. Pump repairs in the late 2000s included installation of a new 5-HP pump for the irrigation system. At the same time, the BFP was repaired and recertified.

The irrigation system is adaptable to either well or city water. The system received upgraded fixtures and system-wide repairs about the same time as the pump and BFP repairs. The increase in pressure made it possible to combine irrigation zones and make the irrigation



# Joslin Garden Preservation Plan

## Existing Conditions

system more efficient.

The irrigation network serves only a portion of the property. Areas with irrigation include:

Wildflower Circle  
Camellia Collection  
Rose Garden  
Pine Woodland  
Formal Lawn and Garden  
Portions of Laurel Hill  
Creeside Meadow  
Scillia Hill

### Underground Oil Tank/Monitoring Well

Altogether, three underground heating oil tanks have been on the property. A 550-gallon gas heating oil tank was installed in 1951 at the west end of the house. A second 550-gallon gas heating oil tank was installed on the north side of the house, but, began taking on water and was removed. A third 550-gallon gas heating oil tank was installed on the east side of the house and replacing the one that took on water. The tanks have all been removed.

There is a monitoring well at the west end of the house in the location of the tank installed in 1951. At the time of removal, there was a small amount of soil contamination, considered a low risk for ground water contamination. NCDENR Water Quality UST Section filed a Notice of Violation (NOV) and an Incident Report in 1999 and the property was assigned Incident #26303.

In 2004, a Limited Site Assessment Report was completed and accepted by NCDENR water Quality UST Section<sup>19</sup>. The property and monitoring well is currently eligible for closure.

To obtain a Notice of No Further Action, it will be necessary to submit a Notice of Residual Petroleum (NRP) with the NCDENR Water Quality UST Section.

### Site Lighting

Several pedestrian scaled light fixtures serve the parking area and entry court to the

residence. There is also porch and deck lighting. The fixtures are in working order and the luminaries appear to be incandescent bulbs.

The trails are not lit.

### Site Pavements and Walls

The concrete driveway and parking areas are in good condition. The driveway, which is approximately 100' long, has an incline of 16%. The areas where the steep incline meets the relatively flat area at the top of the driveway and the street, is where low-clearance vehicles and trucks with a long span between axles tend to "bottom out".

A brick retaining wall runs east to west along the length of the lawn panel in front of the house. Plant material is causing some of the brick in the top courses to loosen from the wall.

There is a brick retaining wall along a portion of the north side of the brick walk leading from the house to the formal garden. It appears in good shape and shows no signs of deflection.

A small timber retaining wall supports the southern side of the formal garden. The timbers appear to be in relatively good condition.

### Public Utilities

Raleigh public water and sewer service the property.

An 8" public water main runs along the west side of West Lake Drive. Domestic water service enters the property from West Lake Drive. There is an existing fire hydrant on the east side of West Lake Drive opposite the property.

There are two 8" sanitary sewers onsite. One runs south from the Gaddy Drive right-of-way, along the west property line to an east-west sewer that runs from Woodrow Drive to West Lake Drive. Both sewers lie within a 20'-wide easement owned by the City of Raleigh.

A sanitary lateral serves the residence from the east-west sanitary sewer and crosses a portion of the back yard near the basement apartment.



# Joslin Garden Preservation Plan

## Existing Conditions

The City of Raleigh's Public Utilities Department's current policy is to keep utility easements clear of trees and shrubs. The two-on-site easements are not currently on any work list for clearing, but, should an emergency occur that requires access to the sanitary sewer, clearing of many of these plants would occur.

Many of the plants within the easements are too large or mature to successfully transplant. Reproducing these plants through cuttings will ensure a new generation of the plants allowing a legacy of plants should emergency removal occur.

Progress Energy services the area and electrical service is accessible from West Lake Drive.

Cable and communication services, provided by private utilities, are accessible from West Lake Drive.

### Pathways and Trails

The property contains pathways and trails leading from one plant named area to another. The trails are in reasonable condition with a well-worn natural dirt surface. The trails are bordered with branches and twigs, a landscape practice used to recycle tree debris.

There is evidence of some erosion issues along certain trails. Recommendations for trail improvements are located under the Stewardship portion of the Preservation Plan.

The trails are generally one-person wide and many are not handicap accessible. Slopes along the trails can exceed 8%. There are no handrails where grades exceed 5%. Steps, not ramps, negotiate the steeper grades.

Narrow pedestrian bridges, all less than 32" wide, span the unnamed tributary and have steep (>8%) slopes, often on both approaches and their construction materials can be slippery when wet.

These garden features will require modifications to make them accessible to the public.

### Signage and Labels

There is limited signage to orient the visitor to the overall trails system and location of the

plant collections. There are no interpretive signs to describe the plants within the collections.

A simple hand-drawn map is available during the public events. It locates the plant collections within the Garden and provides a brief history of the Garden.

Individual plant labels identify a large number of the plantings. This makes it easier for the visitor to identify the plants within a specific collection. The plant labels generally list the genus, species and common name.

### Parking and Circulation

There is space to park five vehicles adjacent to the residence. All are paved. There is no striping for any of the spaces and there is no designated handicap space.

The driveway averages 8-9' wide. There is sufficient room for personal vehicles to maneuver the driveway alignment. The slope of the driveway at the street exceeds 8% and low profile vehicles scrape the surface at both the top and bottom of the slope.

Steps lead from the driveway to the front walk leading to the house. There are also steps from the front walk to the porch and a step from the porch to the floor elevation.

### Street Frontage

The property has 380' of frontage along the west side of West Lake Drive. The slope of the roadway often exceeds 5% and, from the south, the alignment exhibits an "S" curve configuration, straightening as it approaches the driveway at the north end of the property. The property is on the "blind" side of the "S" curve.

The width of the roadway is +24' and there is no curb or gutter. The right-of way width is  $\pm 30'$ . The frontage topography varies from level to slopes in excess of 10%. The frontage opposite the property and along West Lake Park, have only a limited shoulder width with adjacent stream banks of 2:1. The distance from the top of bank to the east edge of pavement along West Lake Drive is often less than 20'.

There has been no Neuse Riparian Buffer or Jurisdictional Wetland delineations performed along the West Lake Park segment of the unnamed tributary.





# Joslin Garden Preservation Plan

## Existing Conditions

The posted speed limit is 25 mph.



# Joslin Garden Preservation Plan

## Visioning and Programming

### ***Visioning and Programming***

Members of the Joslin family and the City's Park and Recreation Department staff were initially interviewed and their visions for development of the Garden were captured to provide a database for programming, site development and stewardship for the Garden.

The results of these interviews, workshops and the intent of the recorded conservation easement provide an appropriate base for Garden programming.

### **Joslin Family Vision**

On June 8, 2012, Stephen Bentley and Grayson Maughan of Raleigh Parks and Recreation staff and Terry Gleason and Ed Sconfienza from The Site Group met with Mrs. Joslin and her daughter Nell Joslin. The meeting was at the Joslin home. The intent was to solicit responses to a list of pre-submitted questions.

Both Joslins shared their vision for reuse of the residence and educational activities that they thought would be appropriate for the property.

### **Re-use of residence**

Their thoughts of reuse of the residence included:

- Meeting facility for neighborhood groups, garden clubs, women's groups, The Triangle Conservancy and other environmental groups, City staff
- Non-profit retreat facility
- Conference Center

Educational components:

Age appropriate group attractions to the Garden:

- All age groups, especially children
- Mrs. Joslin thought it was especially important to educate students so they could understand nature

Important educational features:

Several features of the property may have never been experienced or appreciated by children. These include:

- The three springs that are onsite
- The Stream and stream banks
- The rolling topography
- The critters
- The vegetable garden, possibility for a community garden
- Plant materials

### **Raleigh Parks Department Vision**

Raleigh Parks Department staff met on June 26, 2012 and toured the Garden, then assembled for a staff retreat. The purpose of the retreat was to discuss the status of the planning and highlight the key issues that could affect developing the Garden as a park.

Staff divided into two groups and brainstormed ideas based on Programming, Site Development and Stewardship for interim, short- and long-term periods. The most common between the two groups were:

- Creation of garden rooms
- Provision for a handicap accessible trail
- (Pervious) pavers, some trail surfacing; compacting
- BMP/storm drainage
- Maintain the Garden as a passive space
- Signage
- Harden trail edges
- Parking and Traffic Calming
- Preserve the collections
- Interpret the Joslin's story
- Future home conversion into a small meeting space



# Joslin Garden Preservation Plan

## Focus Areas

### Focus Areas

#### Garden Rooms

A Garden room could consist of a bench, or two and pervious pavers or another stable pervious material to accommodate wheel chairs. These spaces might take advantage of views, for the enjoyment of adjacent plantings, or provide opportunity for reflection. Locations will need to be field verified.

#### Handicapped Accessible Trail

TSG prepared a map indicating which of the existing trails might be appropriate for accessibility modifications. The selected trails would provide an accessible route from W. Lake Dr toward the house and continue toward the rose garden. An overlook of the Garden could be installed as a Garden Room.

The Preservation Plan is based on GIS topo. Actual topo would be necessary to design the route. The accessible trail could have a hard surface, such as pavers or crushed stone, or both. It could also be the only hard-surfaced trail in the Garden.

As the accessible trail passes through the formal and vegetable garden areas, the use of elevated beds could provide improved access for tactile or sensory interaction.

#### Pervious Pavers and Related Trail Surfacing

City Greenway standards for pavement types may apply. The standard trail surface may be crushed fines. Several of the trails may remain natural surface, compacted. Pervious pavers might be used in parking areas and places, which could experience highest volumes of pedestrian traffic.

#### BMP/Storm Drainage

The nature of the improvements would probably require a nutrient export buy-down, as the increase in impervious surface area would likely be limited.

#### Maintain the Garden as a Passive Space

Use of the house and the Garden should remain within the passive recreation category. The intent of any uses would be low-key and would be by reservation only. Reservations might be limited to non-profits, passive activity groups, garden groups, outdoor groups, reading and educational groups, other public and private groups, and conservation and nature oriented groups. A group would not exceed 20 people.

Park hours may be limited and it was suggested from dawn to 6 PM or similar.

#### Signage

Determine a hierarchy of signs. There is limited signage at present, with the majority of signage being plant labels. The Garden needs Kiosk-type information signs, wayfinding signs, and signs to describe a particular collection.

#### Harden Trail Edges

Currently, the trail edges are defined with tree and brush debris (twigs, branches, etc.). It may be more advantageous to use a stone or similar hard edging. This would keep walkers on the trail and better define the trail limits.

#### Parking and Traffic Calming

Suggestions included providing a hard radius on the Wildflower Island and to widen the driveway from the current 8.5' to 15', accommodate one handicap space at the house and provide parallel parking south of the Wildflower Island. This could provide up to 10 spaces (max). The driveway widening plans could include removing the "hump" from the driveway. Parking spaces could be constructed with pervious pavement.

Suggested on-street parking could provide a parallel handicap spaces across from the trailhead and several other parallel spaces alongside West Lake Dr. Not all spaces would necessarily be directly across from the Garden. Spaces could be provided along West Lake Dr. in areas proximate to the Garden and suitable for widening to accommodate parallel parking.

A topographic survey would be required to design actual parking space locations. On street





# Joslin Garden Preservation Plan

## Focus Areas

parking requires vetting with Planning, Zoning and Stormwater.

West Lake Dr. has an “S” curve along a portion of the property frontage and parallel parking could exacerbate the existing sight lines around the curves.

Two methods of traffic calming were suggested: speed humps and speed limit reduction.

- A speed hump could be placed adjacent to the cross walk associated with the handicap spaces and another hump placed near the driveway. Additional review would be needed by COR Transportation Planning.
- A speed limit reduction from the current 25 MPH could be requested. Additional review would be needed by COR Transportation Planning.

### **Preserve the Collection**

Cuttings could ensure continuation and preservation of the current collection and be planted in City of Raleigh Parks to be held for replacement within the Garden.

The recorded Conservation Easement requires that one acre of the property remain wooded. This wording could be revised to be compatible with the intent of Section 10-2082.14 of the City Code, “Establishment and Protection of Tree Conservation Areas”. Strict adherence to the TCA requirements could be counterproductive and damaging to the intent of the Conservation Easement and the purpose of the Garden and the existing collections.

Additional discussion with zoning is required.

### **Interpretation of the Joslin Story**

There should to be a mechanism to tell the Joslin Story, recounting their contributions to Raleigh, the significance of their home and Garden and the legacy they provided to the community. The actual mechanism would depend on the format and placement of the information.

### **Future home conversion into a small meeting space**

If used as a park office, the house would have to comply with the current office use standards. One parking and one handicap space would be required at the house. The

caretaker would be on-site infrequently. If not reserved, the house would only be open during the time the caretaker is present.

### **Garden Alternatives**

The Jeu de Paume is one of the few open and sunny areas in the Garden and could be used as a sun-loving plant area. The underlying clay court would need to be incorporated into the soil to allow adequate drainage.

The arbor at the end of the Jeu de Paume could become a garden room.

### **Potential Partnerships**

Continuing existing partnerships and forming new ones can promote relationships, volunteerism and philanthropy.

Current relationships exist with the Triangle Land Conservancy, NC State and the JC Ralston Arboretum and the City of Raleigh Parks and Recreation Department. There is also a strong personal relationship with Coker Arboretum in Chapel Hill and Kalmia Gardens in Hartsville South Carolina

New relationships should be forged with other gardens in the Triangle for opportunities to share information. Relationships could be extended to other conservancy groups and service organizations such as Boy and Girl Scouts. Civic groups should also be included, including local garden clubs and other groups interested in horticulture.



# Joslin Garden Preservation Plan Stewardship

## Stewardship

Providing stewardship is a key component to further the importance of maintaining the Garden as an example of an urban oasis. To provide stewardship, it is necessary to prepare the Stewardship Management Plan.

The Stewardship Management Plan needs to provide guidance for tending the Garden in a systematic way that promotes plant health and continuity. The Stewardship Management Plan should be prepared during the short-term period while the house is still occupied by Mrs. Joslin. It should provide answers to management questions such as:

- How are the plants, trees and shrubs maintained
- What should be done when a plant dies
- Use of natives
- Plant selection choice
- Annual bloom calendar
- Storm damage cleanup
- Use of herbicides, fungicides and insecticides
- Vandalism
- 

As the list is finalized and the management plan prepared, the Garden will benefit from the continuity of guidance the management plan can provide.

There are several “projects”, which can occur while the Stewardship Management Plan is being readied. These short-term projects can include:

- Continuation of GPS plant inventory
- Assessment of the health of the plant inventory
- Removal of dead, dying or hazardous plant material
- Removal of invasives
- Preparation of cuttings of those plant materials with a poor health assessment
- Assess improvements to trails and footbridges to bring the trail system to City standards
- Additional cultural/historical research



# Joslin Garden Preservation Plan

<sup>1</sup> Wake County Registry BM1911; PG 0011. Recorded Subdivision Plat prepared by V.D. Stronach, 1911

<sup>2</sup> Wake County Registry BK 0686; PG 0290. Deed from Carrie D. Laughinghouse to F.B. Hamrick & wife, 1935

<sup>3</sup> Wake County Registry BK 0743; PG 0573. Deed of Conveyance from F.B. Hamrick & wife to Claudia Jones Hurt, 1937

<sup>4</sup> Wake County Registry BK 1038; PG 0565, Deed of Conveyance from Claudia Jones Hurt to William and Mary Joslin, 1950

<sup>5</sup> Wake County Registry BK1830 PG 0539. Deed from A.C. and Anne Hooper Kimrey to William and Mary Joslin, 1968

<sup>6</sup> Wake County Registry BK 7266 PG 0138 and BM 1996; PG 1761. General Warranty Deed from William Joslin, Trustee to William and Mary Joslin, 1996

<sup>7</sup> Wake County Registry BK 11224 PG 0026 and BM 2005; PG 0308. Property Transfer and Easement Abandonment from Clifton and Anna Benson to William and Mary Joslin. 2005

<sup>8</sup> Wake County Registry BK3905 PG301through 310 and BM2006 PG1742.

<sup>9</sup>

<sup>10</sup>

<sup>11</sup> Wake County Registry BK 7802; PG 0591. Granting of Conservation Easement by William and Mary Joslin to the Board of Trustees of the Endowment Fund of North Carolina State University, 1997

<sup>12</sup> Wake County Registry BK 8271; PG 2699.

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